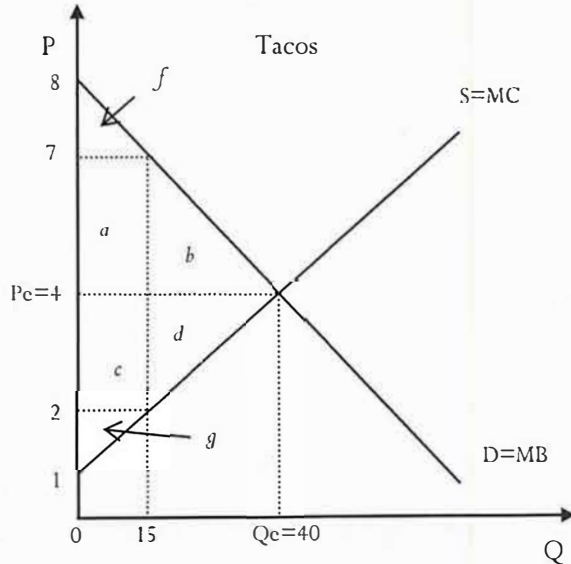


PROBLEM SET 6

ch. 10, excise taxes & DWL;
ch. 11, protectionist trade policy

Instructions: Answer all the questions correctly. If you don't know what CS and PS is, you better go learn before trying these.

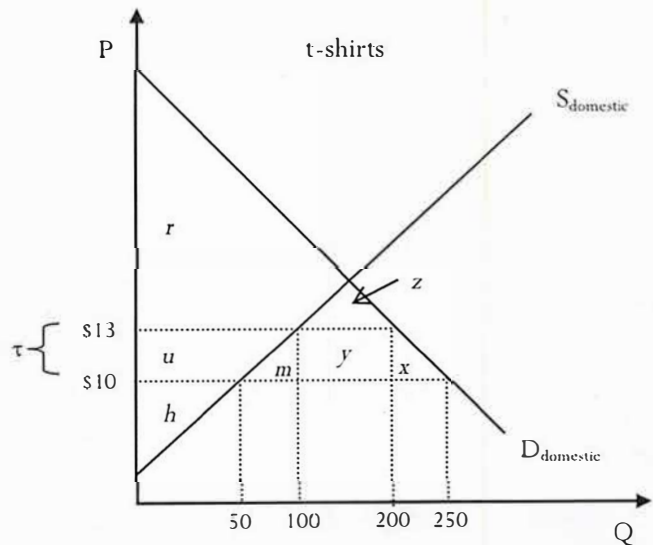
Consider the taco market, illustrated in the graph to the right. Initially the P_e is \$4 and 40 tacos are bought/sold per day. The Charleston government then imposes an excise tax on the sellers of tacos.



1. Prior to the tax, what area(s) represent the CS in the market? $a+b+f = (4 \cdot 40) \cdot \frac{1}{2} = \80
2. What area(s) represent the PS prior to the tax being imposed? $c+d+g = (3 \cdot 40) \cdot \frac{1}{2} = \60
3. What area(s) represents the total tax revenue? $a+c = 5(15) = \$75$
4. After the tax has been imposed, what area represents the CS lost due to the tax? $a+b$
5. After the tax has been imposed, what area represents the PS lost due to the tax? $c+d$

6. How much CS remains after the tax was imposed? f
7. How much PS remains after the tax was imposed? g
8. Imagine if the S and D curves were much steeper. (a) Would the DWL area be larger or smaller than it is now? smaller (b) Would the tax revenue area be larger or smaller than it is now? larger

The t-shirt market is illustrated in the graph to the right. Suppose the upcoming Trump administration adds a 30% tariff (= \$3) to imported t-shirts.



9. What area(s) represents the initial CS, prior to the tariff being imposed? $r+u+m+y+z+x$
10. What area represents the tariff revenue? y
11. What area represents the CS remaining after the tariff was imposed? $r+z$
12. What area(s) represents the PS after the tariff was imposed? $h+u$
13. What area(s) represent the DWL caused by the tariff? $m+x$
14. Which DWL area represents CS lost due to fewer transactions? x
15. Which DWL area represents the value of wasted resources from inefficient American producers increasing their production from 50 to 100? m